

Notice of Allowability**Application No.**

10/598,462

Examiner

Tiffany A. Fetzner

Applicant(s)

GLEICH, BERNHARD

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to September 22, 2008 and the telephonic interview of December 17, 2008.
2. ☒ The allowed claim(s) is/are 1-14, Ex Amended claim 15, 16, 18, & 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 12/17/2008.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/T. A. F./
Examiner, Art Unit 2831

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with **Attorney Thomas E. Kocovsky Jr. Reg. No. 28,383** on **December 17, 2008** along with authorization to charge any necessary fees to applicant's deposit account.
3. The application has been amended as follows:

A) Replace claim 15 of the applicants October 17th 2008 amendment and response with the following **Examiner amended claim 15**:

Claim 15 --- A magnetic resonance imaging scanner comprising:
a magnet generating a temporally constant magnetic field;
one or more magnetic field gradient-generating structures superimposing selected magnetic field gradients on the temporally constant magnetic field;
a radio frequency coil selectively producing a radio frequency field; and
a magnetic field-modifying structure designed to enhance the temporally constant magnetic field, the magnetic field-modifying structure having a longitudinal demagnetization factor parallel to the temporally constant magnetic field and a tangential demagnetization factor in a tangential direction transverse to the temporally constant magnetic field, the longitudinal demagnetization factor being larger than the tangential demagnetization factor to produce tangential flux guiding, wherein the magnetic field-modifying structure includes:
ferromagnetic particles that are generally smaller than a skin depth of the radio frequency field in the magnetic material in at least one dimension; and
an insulating binder in which the ferromagnetic particles are dispersed. ---

B) Cancel claim 17

The following is an examiner's statement of **Reasons for Allowance**:

4. With respect to **independent claim 1, and examiner amended independent claim 15**: these independent claims are considered to be allowable over the prior art of record because the prior art of record neither discloses nor suggests an MRI imaging scanner comprising: **a radio frequency shield; a radio frequency coil disposed inside of the radio frequency shield and selectively producing a radio frequency field; and a magnetic field modifying structure designed to enhance the temporally constant magnetic field, the magnetic field modifying structure being disposed inside of the radio frequency shield and including particles of magnetic material generally smaller in at least one dimension than a skin depth of the radio frequency field in the magnetic material dispersed in an insulating binder** as set forth in **independent claim 1**, and correspondingly in Examiner amended independent claim 15, as set forth above. Specifically, it is the combinational structural features set forth in independent claim 1. and examiner amended independent claim 15 which makes applicants claim novel and not obvious over the prior art of record. The examiner notes, however that it is the entire combination all of the claim limitations taken as a whole, as set forth, in **independent claim 1, and examiner amended independent claim 15**, which constitutes the full novelty and non-obviousness of applicant's instant application. The examiner notes that, all of the examiner amendments herein to **examiner amended claim 15** are fully supported by the original specification as filed, and that the application is considered to be free of new matter.
5. With respect to **dependent claims 2-14, 16, 18, and 19** each of these claims is considered to be allowable over the prior art of record, by the examiner, because they each depend from an allowable independent claim or an allowable Examiner amended independent claim.
6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiners comment

Priority

7. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Priority date Arguments

8. Applicant's arguments, see pages 7-8 of the applicant's remarks, filed **September 22, 2008**, with respect to the effective priority date of the application have been fully considered and are persuasive, in view of applicants arguments, the amendments to the specification in the original August 31, 2006 preliminary amendment, the examiner amendments made herein, and you love the originally filed application data sheet, setting forth that the instant application claims the priority benefit of US provisional patent application 60/549,732 for the present application. Because the applied prior art of record, of **Barbic**, US 7,202,667 has an effective priority date of June 7, 2004, which is after the applicant's earliest effective US provisional priority date of March 3, 2004, the prior art rejections of June 27, 2008 office action are considered moot. The applied prior art of **Barbic**, is no longer available as prior art against the claims of the instant application, and the rejections of June 27th 2008 have been rescinded.

Prior Art of Record

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) *Barbic US patent **7,202,667** issued April 10th 2007, filed June 3rd 2005 with an effective US priority date of **June 7th 2004**.

B) *Richard EP Patent Application **EP 0737867 A1** published October 16th 1996

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tiffany Fetzner whose telephone number is: (571) 272-2241. The examiner can normally be reached on Monday, Wednesday, and Friday-Thursday from 7:00am to 2:10 pm., and on Tuesday and Thursday from 7:00am to 5:30pm.

Art Unit: 2831

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Diego Gutierrez**, can be reached at (571) 272-2245. The **only official fax phone number** for the organization where this application or proceeding is assigned is **(571) 273-8300**.

12. Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PMR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TAF/

January 1, 2009

/Brij Shrivastav/

Primary Patent Examiner
Technology Center 2800